

Remarks

Reconsideration of the present patent application, as amended, is respectfully requested.

Of pending claims 1-7, 9-14, 16, 18-25 and 27-33, all were rejected. The applicants have canceled claims 2-4, 10-12, 18-19, and 28-30. Independent claims 1, 9, 16, 24, 32 and 33 remain, and the applicants address the rejection of those claims and the remaining dependent claims 5-7, 13-14, 20-23, 25, 27 and 31.

Substantively, of previously pending claims 1-7, 9-14, 16, 18-25 and 27-33, claims 1, 2, 5-7, 9-10, 13-14, 16, 18, 20-25, 27-28, and 31-33 were rejected under 35 U.S.C. §103(a) as being obvious over previously cited Swanson patent, U.S. Patent No. 6,433,904. That is, all of the independent claims 1, 9, 16, 24, 32 and 33 were rejected on the same grounds of obviousness. The applicants argue against this obviousness rejection with respect to all of the independent claims.

The Examiner's response to the applicants' previous arguments provides a good statement of the issue joined over obviousness. The Examiner stated:

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning (filed on 28 April 2006, p. 15 last paragraph), it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In particular, notice the motivation in the standing rejection of the claims:

"One of ordinary skill in the art would have been motivated to do this to implement further upgrading of channels (col. 6, l. 8)" (excerpted from the treatment of claim 1 above).

"The motivation would be the common improvement of increased transmission capacity (col. 6, l. 8), which is an explicit purpose of Swanson's teachings (col. 3, l. 3-7)" (excerpted from the treatment of claim 1 above).

That is, the explicit purpose of Swanson's teachings is to provide a method and apparatus "for upgrading existing optical communication systems to provide increased transmission capacity" (col. 3, l. 3-6). Swanson provides an explicit example of upgrading one channel (Fig. 3). Additionally, Swanson considers the future upgrading of multiple channels (col. 6, l. 8, 27-29, 53-54). Therefore, an

obvious method of providing such future upgrading would be to apply the same basic principles of Swanson's one-channel example in Fig. 3 to other channels. Such application of Swanson's teachings would simply be repeated application of Swanson's basic principles, not improper hindsight reasoning. Accordingly, Applicant's argument of improper hindsight reasoning is not persuasive. Hence, Examiner respectfully maintains the standing rejections.

The applicants appreciate the clarity of the Examiner's statements, but beg to differ with his conclusions. The essence of the Examiner's argument is that motivation should make up for the lack of teaching in the cited prior art. As the Examiner has admitted, "Swanson does not expressly disclose: applying error correction coding to said first and second data signals such that said second signal experiences a greater coding gain than said first data signal. Rather, Swanson discloses applying error correction coding (FEC encoder 40) to **one** of the data signals so that the error correction coded data signal experiences a greater coding gain than the other uncoded data signal."

The Examiner continued, "However, coding **multiple** data signals such that one coded data signal experiences a greater coding gain than another coded data signal is obvious within the teachings of Swanson. For example, consider the section "4.Channel Upgrades" on col. 6, l. 6+. It discusses the general procedures for upgrading channels. Swanson provides examples of upgrading from one data rate to another data rate (Fig. 3, col. 8, l. 2-9). However, Swanson does not limit these upgrading teachings to the specific data rates discussed in the examples...." Many techniques are disclosed in the cited patent for making these channel upgrades. But as stated in the previous paragraph, the Swanson patent does not teach the applicants' claimed invention.

To make up for this deficiency, the Examiner suggests, "[A]n obvious method of providing such future upgrading would be to apply the same basic principles of Swanson's one-channel example in Fig. 3 to other channels." Stated differently, the argument is that the applicants' claimed invention is obvious because it is obvious. With due respect to the Examiner, this argument is a tautology and is not a reason.

Secondly, the purported motivation to obtain the benefits of upgrading for increased transmission capacity does not make up for the lack of teaching of the applicants' claimed invention. As pointed out in MPEP §2143.01, motivation is used to make the combination of

references for an obviousness rejection. In the present case, the Examiner argues that motivation provides the prior art teaching for an obviousness rejection. This is an entirely different matter.

Thirdly, if one applied the same basic principles of Swanson's one channel example in Fig. 3, as the Examiner suggests, one would obtain two or more channels with the same FEC coder 40 (and same FEC decoder 42). This is not what is claimed in claim 1. Only by modifying a straightforward application of the same basic principles of Swanson's one-channel example in Fig. 3 to other channels, as guided by the applicants' teachings, does the Examiner reach the applicants' claims. The applicants' claimed invention is reached through impermissible hindsight.

Hence the applicants assert that Swanson patent does not render the applicants' independent claims 1, 9, 16, 24, 32 and 33 obvious and the claims should be allowable. Remaining claims 5-7, 13-14, 20-23 and 25, 27 and 31 should be allowable for at least being dependent upon allowable base claims.

Therefore, in view of the amendments above and the remarks directed thereto, the applicant request that all rejections be withdrawn, that claims 1, 5-7, 9, 13-14, 16, 20-25 and 27, 31-33 be allowed, and the case be passed to issue. If a telephone conference would in any way expedite the prosecution of the application, the Examiner is asked to call the undersigned at (408) 868-4088.

Respectfully submitted,

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